# JOINT MASSACHUSETTS 2002 LOW-INCOME UTILITY MARKET RESEARCH STUDY

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# TABLE OF CONTENTS

	<u>Page</u>
EXECUTIVE SUMMARY	ES-1
INTRODUCTION	1
SECTION I – DATA ANALYSIS	3
1. Background	3
Statewide Demographics	3
3. LIHEAP Benefits and Electric Utility Discount Rates	14
A Other Means-Tested Programs	22
SECTION II FOCUS GROUPS/INDIVIDUAL INTERVIEWS	24
Background	24
Focus Groups Part I: Current Program Clients	26
1. Overview/Findings	26
2. Detailed Results – Current Program Clients	27
Focus Groups Part II – Prospective Clients	30
1. Overview/Findings	30
2. Detailed Results – Potential Clients	31
3 Outreach Suggestions	31
Focus Groups Part III — Community Action Program Directors and Staff	33
1. Overview/Findings	33
2. Detailed Results - Community Action Program Directors and Staff	34
Focus Groups Part IV Representatives from Community Organizations	36
1 Overview/Findings	36
2. Detailed Results - Community Organization Representatives	3 <i>6</i>
SECTION III – SUMMARY OF CURRENT PROGRAMS	39
1. Overview/Findings	39
2. Detailed Descriptions of Outreach Programs	40
3. Energy Assistance Outreach Activities in Other States	44
SECTION IV – RECOMMENDATIONS	46
1. Targeting Communications	47
2. Encouraging Key Audience Participation	47
3. Creating a Name and Implement a Promotional Plan	47
•	
APPENDIX A	A-

# **TABLES**

	¥	age
Table 1.	Distribution of Massachusetts Households With Income Less Than 175%	
	of Poverty	5
Table 2.	Distribution of Households With Income Less Than 175% of Poverty	
	by Percentage of the Number of Towns	7
Table 3.	Distribution of Households With Income Less Than 175% of Poverty	
	by Percentage of Total Households	7
Table 4.	Distribution of Households with Members Who Do Not Speak English	
Tuole 1.	by Town Size	8
Table 5.	Languages Spoken in the Home by the Population More Than	
14010 3.	5 Years Old	9
Table 6.	Distribution of Hispanic/Latino Population	10
Table 7.	Towns with the Highest Numbers of Hispanics/Latinos	11
Table 8.	Towns with the Highest Percentages of Hispanics/Latinos	11
Table 9.	Distribution of Households in Massachusetts Households With Income	
Tuoic 7.	Less Than 175% of Poverty by Investor-Owned Utility Service Areas	15
Table 10.	Distribution of Households Eligible to Receive the Electric	
140.0 10.	Utility Discount Rate by Investor-Owned Utility Service Areas	16
Table 11.	Distribution of Households Receiving LIHEAP and the Electric	
	Utility Discount Rate by Investor-Owned Utility Service Areas	18
Table 12	Distribution of Households With Income Less Than 100% of Poverty	
	by Size of Town in Investor-Owned Utility Service Areas	18
Table 13	Characteristics of Towns With More Than 20,000 Households That Are	
14010 13.	Serviced by Investor-Owned Electric Companies	19
Table 14.	Comparison of Electric Discount Rate Participation by Percent of Participation	20
	Comparison of Eligible Households With Income Under 60% of State	
	Median Income, Under 175% of Poverty, and Under 200% of Poverty	21
Table 16.	Number of Recipients of Selected Means-Tested Programs	23
	FIGURES	
		Page
Figure 1.	Distribution of Massachusetts Households Map	_
	Percentage of Massachusetts Towns by Number of Households	
	Massachusetts Households with Income Less Than 175% of Poverty Map	
	Massachusetts Hispanic/Latino Population Map	
	Massachusetts Rural Area Map	
	Electric Distribution Service Area	

#### EXECUTIVE SUMMARY

## **Background**

The Massachusetts investor-owned utilities – Western Massachusetts Electric Company (WMECO), Massachusetts Electric (MECO), a National Grid Company, NSTAR and UNITIL/Fitchburg Gas and Electric Light Company – sponsored this study in the spring of 2002 to identify strategies that can be used to increase the rate of participation by low-income households in energy efficiency programs, thereby increasing the affordability of home energy for low-income households.

The study design was initially developed by Deborah Sas and Kathleen Agin of WMECO to address outreach and demographic issues in the WMECO service territory. Under their leadership and direction the study plan was expanded to include these issues for the all the Massachusetts investor-owned utilities. The study was supported with low-income energy efficiency funds administered by the four utilities, in cooperation with the Low-Income Energy Affordability Network (LEAN), under an agreement with LEAN to conduct a client outreach and demographics research study.

Energy efficiency weatherization and bill payment assistance is provided by the state through the federal Weatherization Assistance Program (WAP) and the Low-Income Home Energy Assistance Program (LIHEAP) administered by the Division of Energy within the Department of Housing and Community Development. Electric and natural gas utility-sponsored programs include supplemental weatherization assistance and a discount rate.

These programs help to reduce a household's energy burden (percentage of household income spent on home energy) by reducing the cost of energy through direct payment subsidies and the amount of energy used through weatherization. In practice, the combination of payment resources available through government and utility-sponsored programs could reduce the average home energy burden by up to 75% by increasing affordability while reducing arrearages and shutoffs.

The resulting set of services is one of the most comprehensive in the nation. One of the outstanding features of the services provided is that they seek to weatherize all eligible homes. Most states only have sufficient resources to weatherize a small fraction of eligible homes.

Another exemplary feature of the services offered is that they have been developed as an active partnership between the local community action programs (CAPs), electric and gas investor-owned utilities and state agencies including the Department of Housing and Community and Department of Telecommunications and Energy.

The eligibility ceiling for LIHEAP and WAP is 200% of the federal poverty level. <sup>1/</sup> The eligibility ceiling for the electric and gas utility discount rate is 175% of poverty except for KeySpan's gas discount rate which is set at 200% of poverty. The utility-sponsored

The eligibility rate for LIHFAP was set at 200% of poverty based on the FY 2002 federal appropriation, for FY 2003, the rate can change based on the final program appropriation level and can be set as high as 60% of the state's median income.

weatherization program rates are currently being proposed in utility filings and are expected to be set in 2003. MECO, NSTAR and WMECO, for example, have recently proposed an eligibility level of 60% of state median income for 2003. For a family of four, 175% of poverty would be equal to \$31,675, 200% of poverty would be equal to \$36,200 and 60% of state median income would be equal to \$46,815.

The discount rate and LIHEAP are the key entry points for electric utility efficiency programs. As a result, participation in those programs was examined in detail. The purpose of this study was to examine options for increasing enrollment in the electric utility programs and did not focus on strategies to increase enrollment in the gas utility, LIHEAP or WAP programs.

#### **Demographic Analysis**

The analysis was based on a review of the 2000 Census data for Massachusetts. As described in the report, Massachusetts has 2.5 million households of which approximately 491,000 (20%) have incomes of less than 175% of poverty. The number of households residing in areas served by the four utilities is approximately 2.1 million, or 84% of the state's total population. The other households reside in areas served by municipal utilities that do no offer rate discount or weatherization programs.

- Approximately 374,000 households residing in the utility service territories have incomes of less than 175% of poverty and are eligible to participate in the discount rate.
  Households residing in units that include electricity as part their rent payment are not eligible to receive discount rate assistance.
- Almost 53% of the eligible households are concentrated in the 20 largest towns served by the four utilities. These towns, however, account for only 6.6% of all households served by the utilities.
- Approximately 21% of all households (517,500) residing in the state have at least one person whose primary language is not English, and about 21% of these households (115,007), or 4.7% of total households, are classified by the Census Bureau as "linguistically isolated" (have no English-speaker in the home). The rate is considerably higher for towns of more than 20,000. For these towns, about 32% of all households (291,000) have at least one person whose primary language is not English, and 28% (81,000) of these households are linguistically isolated.
- The most common languages after English in the four utility service areas are Spanish (370,011), followed by Portuguese (159,809), French (128,003), Chinese (71,412), Italian (59,811), Russian (32,580) and Vietnamese (30,400).
- While income data by primary language is not currently available from the Census Bureau, the distribution of population by language strongly suggests that households with limited English-speaking ability are more likely to live in the larger towns that have higher percentages of eligible households than those living in towns with lower percentages of eligible households.

# Program Participation in the Utility Discount Rate

In FY 2001, approximately 40% of eligible households received the utility discount rate as compared to 28% of eligible households below 175% of poverty who are receiving LIHEAP benefits. By utility, the rate of eligible households receiving the discount rate is: MECO - 43%; NSTAR - 35%, UNITIL - 49% and WMECO - 43%.

Between 2000 and 2001, the percentage of households served by the utility discount rate increased from about 33% to 40%. In addition, the total number of households served by the utility discount rate exceeded the number served by LIHEAP by 13,000 households; in FY 2001, the number exceeded almost 42,000.

The higher participation level for the utility discount rate is largely attributable to four factors:

- The utilities, in cooperation with the CAP agencies, are operating increasingly effective outreach programs.
- Utility outreach efforts have fewer application requirements than LIHEAP and are therefore easier to apply for.
- Some households apply for the utility discount rate separately from applying for LIHEAP and are possibly not aware that they are also eligible for LIHEAP.
- Some low-income households are eligible to receive the utility discount rate but not LIHEAP because they have heat, but not electricity, included as part of their rent.

In addition, it is possible that the percent of households served in Boston and Amherst reported in this study significantly understates the actual percent of households served because both towns have large populations of potentially eligible students.

While the average rate of participation in the utility discount rate is 40%, the rate by town varies considerably: 40 towns have rates of less than 20%, 137 towns have rates between 20 and 40%, 102 have rates between 40 and 60% and 24 have rates above 60%.

While the demographic analysis focused on households with incomes of less than 175% of poverty, a table was also prepared illustrating the distribution of households by each of the different income breaks used for calculating eligibility for energy assistance or under consideration for eligibility for the four utility service areas. Not surprisingly, the percent of population eligible for assistance increases as the income ceiling is increased. Approximately 17% of eligible households have incomes of less than 175% of poverty, 19.7% have incomes less than 200% of poverty and 25.8% have incomes of less than 60% of the state median.

WMECO and UNITIL have significantly higher percentages of eligible households at all income levels than MECO and NSTAR. At 175% of poverty for example, close to 24% of WMECO's and 23% of UNITIL's population is eligible for assistance as compared to 17% for MECO and NSTAR. At 60% of state median income, the difference is even more significant: WMECO - 35%, UNITIL - 32%, MECO - 26% and NSTAR - 25%.

#### **Focus Group Findings**

Focus groups and individual interviews were used to identify barriers that prevented households from applying for energy assistance programs. They were also used to test possible avenues that would be effective in increasing the number of households served by energy efficiency and low-income rate discount programs. The composition of the focus groups and individuals included representatives from key audiences – participants, prospective participants, community organization leaders, CAP directors and staff.

Areas that were identified as barriers include:

- Lack of information about and understanding of the programs.
- Need for all CAP agencies to provide evening and weekend sign-up hours. Currently only some agencies offer this service option.
- Concerns about the complexities of the sign-up process.
- Confusion with other programs some potential recipients thought that the discount rate and other energy assistance programs applied an asset test, similar to the one applied by the Food Stamps program. Alternatively, some thought that because they were not eligible for Food Stamps, they were not eligible for energy assistance.
- Need for materials to be translated into appropriate languages and staff to be available who can answer questions in those languages.

The majority of focus group participants also received Food Stamps, welfare, or other public assistance. More people than not reported that these programs are not too difficult to sign up for, although several said there is too much paperwork involved and the process takes too long. A number of participants expressed anger at being just over the income level to qualify for some government programs. Most did not report that they know about friends who may be cligible but are not enrolled. Some said that they felt that some of their friends or relatives are too proud to apply for programs in person, but might consider signing up by mail, phone or the Internet.

A majority said more people would enroll if doing so were more convenient. Most of the interviewees suggested going to grocery stores, laundromats, churches, community centers, barber shops and social service agencies to reach prospects. About half the participants attend yearly neighborhood or regional events. Most people said it would be helpful to sign up for programs at these places.

Clients were mixed in their assessment of energy assistance programs and the ease of signing up. Most reported satisfaction with the programs administered for electricity. They also commented on outreach efforts and suggested additional avenues to reach the target population. None of the clients understood that there were specific programs to obtain discounts or weatherization support. Whether in individual interviews or in focus groups, clients indicated that to their knowledge, they were registered for all energy programs for their income levels. The clients also reported that they trusted the program staff at the agencies to provide accurate information at CAP, food bank and other social service agencies.

Their view of government programs in general was that they are complicated and required too much paperwork. A number of these clients were savvy about finding out about discounts, sales and coupons, but they still did not understand each energy program for which they received lower bills.

#### Recommendations

Even with the best efforts, it is likely that the utility efficiency and rate discount programs will never reach 100% of the eligible population because a small percentage of households move during the application period, reside in master-metered building or are not interested in applying for program assistance.

In order to increase the rate of participation to those households that can be reached, however, the study recommends the development and implementation of a comprehensive multi-tiered outreach plan. The plan should be designed to increase the rate of participation in the utility energy efficiency programs during the next five years and should be based on the findings from the focus groups and the program data. It should be coordinated statewide in order to more effectively support sign-up for energy efficiency and related assistance programs.

The first part of the plan should focus on improving access and linkages among programs. All of the following elements should be first tried on a pilot basis to test out and develop the most effective implementation strategies. These tasks would include:

- Facilitating enrollment of all households who receive a benefit under one of the 12 means-tested programs that are currently used to qualify households for the discount rate and energy efficiency programs at the time of sign up by working with governmental agencies to develop an efficient data matching program. In addition, the utilities should continue to work closely with DOER with respect to its recommended automated eligibility verification program and its recommended waiver to exchange client information.
- Working with Public Housing Authorities and landlords to encourage enrollment at the time of lease signing.
- Performing targeted outreach to individuals that live in publicly-assisted housing.

• Offering a mail-in application for households to send in verification information for fuel assistance or utility energy efficiency programs to the CAPs directly.

The second part of the plan should explore options for developing a statewide coordinated effort to market the program to potential applicants. Key program elements could include:

### 1. Targeting Communications

In order to quickly and effectively increase the numbers of participants in the discount rate, energy efficiency and weatherization programs, promotional efforts in the initial stage should be directed toward cities and towns in each service territory with the highest concentration of eligible participants and the lowest participation rates.

## 2. Encouraging Key Audience Participation

- Targeting organizations that have access to potential recipients, including those who visit people at home, such as the Visiting Nurses Association and Meals on Wheels, training staff in the programs, and distributing materials, including applications if possible. Other organizations to include are those who support the working poor, such as service providers of Emergency Assistance as a safety net for individuals who have temporary income problems, including the unemployed, providers of services that resettle refugees and immigrants and Department of Revenue.
- Supporting CAP agencies through a public relations campaign consisting of public service announcements on a monthly basis to all media outlets throughout the state print, television and radio. Technical assistance can be provided to CAP agencies to help them develop a monthly press release they can personalize and information about contacts at appropriate media outlets each month.
- Developing a comprehensive community outreach program targeting businesses, schools, churches, bill payment agents and other organizations to provide informational materials and related assistance.

## 3. Creating a Name and Implementing a Promotional Plan

The goal of this effort would be to bring significant visibility quickly for the programs and the key players – representatives from all of the electric utilities, CAPs, state officials and community organizations. The promotion can take the form of a press conference or editorial briefings and a press release announcing the goals, new promotional materials, and the dedication of each group to increasing numbers. The next step would be to develop feature stories about the groups working together and about success stories with clients (with the clients' permission). There can also be a release every few months showing the number of participants throughout the state and the fact that there are increases. Other activities can include:

- Creating advertisements and promotional materials, such as brochures, calendars and posters, for each of the utilities and all of them together, and making sure that the messages are simple and clear. Using these advertisements and materials in free newspapers and circulars, for bus signs, for distribution at such places as grocery stores, barbershops and laundromats, employment centers as well as with organizations such as Head Start. Focus promotion of these programs on local newspapers versus statewide ones and on television local cable channels and evening news rather than other programs. Radio and television advertising can be considered, at least in metropolitan areas such as Boston and Worcester.
- Developing materials in languages significantly represented in the service territory.
- Using the word "discount" and the program as either the lead in the promotional materials and effort or at least emphasizing it.
- Examining a current program that one utility uses successfully and use it if appropriate in the other utilities' outreach efforts.

## **Best Practices Report – 2002 Low Income Metric 2**

December 27, 2002

NSTAR Electric, Massachusetts Electric Company, Nantucket Electric Company, Western Massachusetts Electric Company and Fitchburg Gas and Electric Light Company, and Cape Light Compact<sup>1</sup> are submitting this report to update LEAN on the status of the low-income metric two, which supports LEAN efforts to develop consistency of program delivery.

#### Comparison of measures and savings

In 2002 the Massachusetts electric utilities and Cape Light Compact completed a project to compare existing measures and savings assumptions among the utilities. Megdal & Associates and GDS Associates, Inc. were hired to compile and assemble utility specific information into a matrix on the following key areas:

- 1. Demographics
- 2. Low Income Program Eligibility
- 3. Energy Efficiency Measures Offered
- 4. Measure Eligibility
- 5. Measure Costs
- 6. Savings and Related Assumptions
- 7. Educational Components
- 8. Non-Energy Benefits
- 9. Gas Utility and Health and Human Services (HHS) Coordination

The working group found this document helpful as a baseline for ongoing best practices discussions. However, since we decided not to expend the resources necessary to complete the matrix, we agreed to treat it as an internal, incomplete working document. The working group expanded to include field operation staff representing the sponsoring utilities, Cape Light Compact, and members of LEAN and have made the following recommendations:

# Items the working group agreed should be adopted immediately by all program administrators as Best Practices:

- 1. Consistent offering of refrigerator features and sizes, coordinating purchases to the extent that would make this possible. Size ranges are (in cubic feet): 10-12, 13-14, 15-16, 17-18, 19, 20, 21, 22, 24-26.
- 2. Lighting

The utility metrics, referred to here, are not applicable to the Cape Light Compact ("Compact"), however the Compact strives to coordinate it's programs on a statewide basis where appropriate.

- 3. Hours of use threshold for Compact Florescent Light (CFL) replacement equal to two hours.
- 4. Hours of use threshold for fixture replacement (where offered) equal to three hours
- 5. Maximum CFLs per household should not exceed twelve. Preference will be given to installing fixtures.
- 1. Package of low cost energy efficiency materials for each household to include nightlights, refrigerator thermometer, refrigerator brush, clothespins.
- 2. Quality Control infrared scanning of ten percent of the weatherized homes, to include every subcontractor. Share scanning information (i.e., Department of Energy (DOE) and gas scanning results) on the same house.
- 3. The DOE/Massachusetts standards will be the uniform weatherization measures and criteria as already adopted by the utilities.
- 4. The DOE/Massachusetts standards for health and safety as already adopted by the utilities will be uniform measures for all. These health and safety measures include but are not limited to: Carbon Monoxide testing, knob and tube inspection, dryer and bathroom ventilation, gas leak detection, and combustion appliance testing.

# Items the working group agreed to explore in 2003 for additional Best Practices:

- 1. Refrigerator metering protocol, including statewide training (appropriate uses of AHAM or metering, or both, role of education)
- 2. Customer education.
- 3. Lighting fixture replacement protocol, including statewide training.
- 4. Quality Control infrared scanning: develop uniform and comprehensive sampling protocol.
- 5. Health and safety measures: Combustion Area Zone (CAZ) testing, pressurization testing, electric appliance testing (e.g., lint inspection, wiring inspection).
- 6. Other home-installed measures.
- 7. Custom measures (e.g., mattresses, mystery houses).
- 8. Coordination and training.
- 9. Comprehensive Quality Control protocols.
- 10. Washing machines.
- 11. Air conditioners.

# The working group agreed to consider the following areas for development of incentive metrics for 2003:

1. Implement 2002 Best Practices and develop and implement additional Best Practices.

- 2. Coordinate with any alternative energy proposals offered by LEAN (e.g., to Massachusetts Technology Council).
- 3. The utilities understand that LEAN wants to explore fuel switching.
- 4. Analyze high efficiency washer measures including replacement on burnout and multi-family applications perhaps requiring removal of coin slots. Analyze air conditioner replacement and demand response applications.

We believe that by completion and documentation of these tasks NSTAR Electric, Massachusetts Electric Company, Nantucket Electric Company, Western Massachusetts Electric Company and Fitchburg Gas and Electric Light Company, and Cape Light Compact have completed low-income metric number two at the exemplary level.

Respectfully submitted by,

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